

CLAIMS

What is claimed is:

1. A composite reactor wall for a fluidized-flow gasifier, said reactor wall comprising the following elements (a - f), arranged sequentially from an outside of said reactor wall to an inside of said reactor wall:
 2. a) a pressure shell (2), having an outer surface and an inner surface, and forming an enclosed gasification chamber;
 3. b) a ring-shaped gap (3), adjacent to at least a portion of said inner surface of said pressure shell, through which gap a cooling medium is circulated;
 4. c) a cooling wall (4), forming an inner wall of said ring shaped gap (3);
 5. d) a thermally conductive ramming mass (5), adjacent to said cooling wall (4);
 6. e) a solid layer of slag (6), adjacent to said thermally conductive ramming mass (5); and
 7. f) a liquid film of slag (7), adjacent to said solid layer of slag (6), and in contact with reaction material in said gasification chamber of said gasifier.
1. 2. The reactor wall according to claim 1, further comprising fixation means (8) attached to said cooling wall (4) to provide separate means for holding said ramming mass (5) in place.
1. 3. The reactor wall according to claim 2, wherein said fixation means (8) is selected from the group consisting of pins and anchors.
1. 4. The reactor wall according to claim 1, further comprising cooling medium-

2 carrying half-tubes (9), which are attached to said pressure shell (2) to form said
3 cooling wall (4).

1 5. The reactor wall according to claim 4, further comprising fixation means (8) for
2 attaching said thermally conductive ramming mass (5) to said cooling medium-carrying
3 half-tubes (9).

1 6. The reactor wall according to claim 5, wherein said fixation means (8) is
2 selected from the group consisting of pins and anchors.

1 7. The reactor wall according to claim 4, wherein said cooling medium-carrying
2 half tubes (9) have a cross-sectional shape selected from the group consisting of semi-
3 circular and elliptical.

1 8. The reactor wall according to claim 4, wherein said cooling medium is water.

1 9. The reactor wall according to claim 1, wherein said ramming mass is silicon
2 carbide.